

CGAGGGCCTTTAGCGCCTCC (SEQ ID NO:5),

GATCCTCAACACATCTTCCG (SEQ ID NO:6),

SacI-CCCT GATAATTGCCGC (SEQ ID NO:7), and

Sall-CGCTTACTCCTGTATTACGC (SEQ ID NO:8);--

At page 12, line 7, change "15D," to --15D.-- and insert thereafter --This

isolate has been deposited at the AmericanType Culture Collection, 10801 University
Boulevard, Manassas, VA 20110-2209, and --.

IN THE CLAIMS

Please cancel claims

~~1-6, 9, 14-19, 22, 26, 28-33, 36, 38, and 40-43.~~

Please add the following new claims:

-- 45. A method for introducing and expressing a gene in animal cells comprising infecting said animal cells with live invasive bacteria, wherein said bacteria contain a eukaryotic expression cassette encoding said gene, wherein said gene encodes a vaccine antigen, wherein said vaccine antigen is expressed at detectable levels, and wherein said animals cells are cultured in vitro.

46. The method of claim 45, wherein said invasive bacteria is selected from the group consisting of *Shigella spp*, *Listeria spp.*, *Rickettsia spp* and enteroinvasive *Escherichia coli*.

47. The method of claim 46, wherein said invasive bacteria is attenuated.

48. A method for introducing genetic material in animal cells comprising introducing to said animal cells live invasive bacteria, wherein said bacteria contain a

vector containing said genetic material, wherein said genetic material encodes a vaccine antigen, wherein said vaccine antigen is expressed at detectable levels, and wherein said animals cells are cultured in vitro.

49. A method for introducing and expressing a gene in animal cells comprising infecting said animal cells with live invasive *Shigella spp.*, wherein said *Shigella spp.* contain a eukaryotic expression cassette encoding said gene, wherein said gene encodes a vaccine antigen, wherein said vaccine antigen is expressed at detectable levels, and wherein said animals cells are cultured in vitro.

50. The method of claim 49, wherein said *Shigella spp* is *Shigella flexneri*.

51. A method for introducing and expressing genetic material in animal cells comprising introducing to said animal cells live invasive *Shigella*, wherein said *Shigella* contain a vector containing said genetic material, wherein said genetic material encodes a vaccine antigen, wherein said vaccine antigen is expressed at detectable levels, and wherein said animals cells are cultured in vitro.

52. The method of claim 51, wherein said *Shigella* is *Shigella flexneri*.

53. A method for inducing an immune response in an animal comprising infecting said animal with attenuated live invasive bacteria, wherein said bacteria contain a eukaryotic expression cassette encoding said gene, wherein said gene encodes a vaccine antigen, wherein said vaccine antigen is expressed at levels sufficient to induce an immune response, wherein said invasive bacteria are administered to a mucosal surface of said animal.

54. The method of claim 53, wherein said attenuated bacteria is attenuated *Shigella flexneri*.